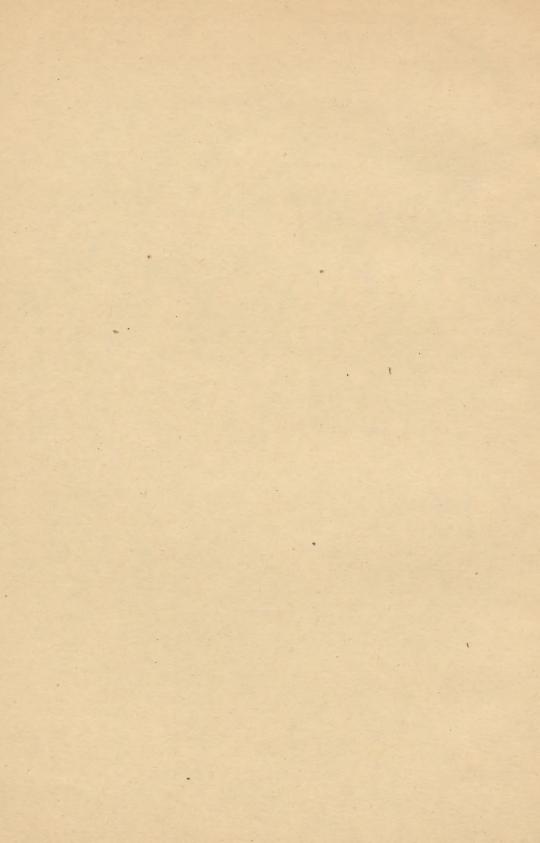
## Ederbohls (G.M.) Report of five cases of acute appendicitis —





Ederbohls (g.m.)

[Reprinted from the New York Journal of Gynæcology and Obstetrics for February, 1894.]



## REPORT OF FIVE CASES OF ACUTE APPENDICITIS.\*

By G. M. Edebohls, M. D.,

Professor of Gynæcology, Post-graduate Medical School of New York.

CASE I.—Miss O. B., aged nineteen, was seen in consultation with Dr. E. J. Gallagher, from whom the following history was obtained: Her periods, up to the last, had always appeared with regularity. On July 6, 1893, her menses appeared, one week overdue. On July 7th she was caught in a rainstorm and wet through and through. During the night menstruation ceased, and sharp abdominal pains suddenly developed; these pains soon became localized in the right groin.

Dr. Edebohls first saw the patient with Dr. Gallagher on July 9th. They found her in shock; temperature, 103.25°; pulse, 140 and very small; bowels tympanitic; abdomen sensitive to pressure in several places, but especially over McBurney's point, where a thickened, rounded cord, running over the pelvic brim into the pelvis, could be distinctly palpated.

Examination per vaginam revealed a tender mass behind and to the right of the uterus. The mass was of about the size of the normal uterus, and was continuous outward and upward with the mass felt in the right iliac fossa. Uterus and left annexa normal in size and position. Right annexa not palpable, being lost in the pathological mass.

Diagnosis.—Acute appendicitis, with a mental reservation of possible ruptured tubal pregnancy.

Operation advised and performed at the patient's home on July 10th, at 3 P. M.—sixty-three hours after the beginning of the attack—with the assistance of Drs. E. J. and William Gallagher and John McParlan. Ten-centimetre incision along outer border of right rectus

<sup>\*</sup> Read before the New York Obstetrical Society

abdominis, the lower end of incision reaching down to Poupart's ligament. The presenting intestines were deeply injected and inflamed, and covered with a thick fibrinous layer, but not adherent in such a manner as to shut off the general peritoneal cavity. After lifting the intestines out of the right iliac fossa the acutely inflamed and very much enlarged right Fallopian tube, covered with plastic exudate and embracing a normal right ovary, was encountered. The condition of the tube was so bad that it was removed together with its ovary.

The appendix vermiformis was now sought for and found extending from behind the caput coli along the posterior aspect of the right broad ligament downward and inward into the pelvis, where it occupied Douglas's sac, which, with its surrounding exudate and pus, it almost entirely filled.

The appendix measured fully eight centimetres in length by about two centimetres in average diameter, being altogether the size and much the shape of a large thumb. More than half of its circumference, that distal from the attachment of the meso-appendix, was gangrenous along its entire length, the remainder of the wall being intensely congested and swollen. Parts of the gangrenous wall had fallen away, leaving the interior of the appendix in free communication with the peritoneal cavity. Two bean-shaped masses of hardened fæcal matter were found inside of the appendix, which was surrounded by a great deal of exudate and a small quantity of pus.

The diseased appendix was shelled out of Douglas's sac, the intestines being held out of the way and the peritoneal cavity protected by sterilized gauze, tied off with fine silk and removed. The rotten condition of the cæcum at the site of origin of the appendix did not permit of the usual Lembert suture over the inverted stump of the appendix.

The bed from which the pathological masses were removed, and the adjacent inflamed coils of intestine, were dried with sterilized gauze, touched with gauze wrung out of 1-to-1,000 sublimate solution, and again dried. No irrigation. The bed was then packed with iodoform gauze, the end of which was led out of the lower angle of the wound. The upper two thirds of the wound were closed with throughand-through silkworm sutures. Usual dressing of sublimated gauze.

Patient rallied well from the operation. Pulse and temperature became normal on the third day, and convalescence thereafter was uninterrupted. The united part of the abdominal wound healed by first intention, and Dr. Gallagher took care of the cavity and the wound until complete closure some three weeks later.

CASE II.—Miss A. K., aged fifteen, was seen in consultation with Dr. D. J. Ruzicka, her attending physician, and Dr. H. C. Hoefling. She had been well all her life, with the exception of an attack of appendicitis in March, 1893, for which she was treated by Dr. Ruzicka. The attack was of a mild type, lasted about ten days, and was followed by a still milder relapse at the end of ten days more.

From that time she was perfectly well until Thursday, November 16, 1893, at 11 P. M. Then, very suddenly, great pain in the right groin, radiating into the thigh, and vomiting; pulse, 120; no elevation of temperature. No great change until the next day, Friday, at 9 P. M., when the temperature ran up to 102°, the pulse still remaining at 120. On Saturday, at 3 A. M., sudden very acute pain, profound shock, and great prostration; temperature, 103°; pulse, 136, small and thready.

This was still her condition when Dr. Edebohls first saw her, on Saturday, at 6 A. M. Dr. Ruzicka had diagnosticated acute appendicitis, with rupture occurring three hours previously, and in this diagnosis Dr. Hoefling and he concurred. Immediate operation was advised and accepted by the girl and her family.

Operation, November 18th, at 9 A.M., thirty-four hours after beginning of the attack, and six hours after perforation. Ten-centimetre incision, slightly oblique, its center corresponding to a point midway between the anterior superior spine of the ilium and the umbilicus. When the peritoneal cavity was opened, about sixty grammes of softened fæces, mixed with serum, ran out. There were absolutely no adhesions to shut off this collection in the free peritoneal cavity, although the angry congestion and some soft deposits of fresh lymph indicated the beginning of acute peritonitis.

Sterilized gauze was at once placed in such a way as to protect the general peritoneal cavity, and the fluid fæces were mopped up and removed by means of dry gauze serviettes, without irrigation. The appendix was found on the inner and posterior aspect of the cæcum. It was but moderately thickened, partially gangrenous, and doubled up on itself in the middle, so that the free end was attached by adhesions to its point of insertion into the cæcum. The perforation had occurred at the point of flexure, on its inner aspect, and soft fæcal matter was escaping thence into the peritoneal cavity. The appendix was tied off at its base and the stump inverted into the cæcum by suturing the peritonæum over it. After another dry cleansing and touching all approachable contaminated surfaces with gauze wrung out of 1-to-1,000 sublimate solution; the region about the site of the removed appendix

was packed with iodoform gauze, the end of which was led out at the lower angle of the wound. No irrigation whatever, the danger of spreading infection by means of it being considered greater than any possible advantage that might accrue from its use. The upper two thirds of the wound were closed by through-and-through silkworm sutures.

Patient bore the operation well. The gauze packing was removed three days later and a rubber drain substituted. An acute pneumonia, involving the lower two thirds of the right lung, supervened on the sixth day and sent the temperature, which had been normal for two days, up to 104.5°. The pneumonia ran a pretty tempestuous course for five days, when it subsided. The patient has since made a good recovery.

Chronic Appendicitis.

CASE III.—Miss M. B., aged eighteen, came under observation in January, 1893. She had suffered for nearly two years past with symptoms due to a movable right kidney, and had during that time had several attacks of appendicitis.

On examination, there were found an endometritis and a right kidney movable to the extent of ten centimetres. The appendix vermiformis could be palpated as a distinct hard cord, about the diameter of a lead pencil, sensitive on pressure.

On February 10, 1893, Dr. Edebohls performed curettage of the uterus, and nephrorrhaphy for fixation of the right kidney. During convalescence from these operations she had an attack of appendicitis, which was treated by blisters and internal medication. She was discharged on March 27th, the appendix being still enlarged and sensitive on pressure.

The symptoms of appendicitis persisted, with exacerbations, until her readmission a month later. During this time repeated examinations showed the appendix more or less enlarged at various periods.

On April 28th he removed the appendix vermiformis by operation. The appendix was found elongated, thickened to the size of a lead pencil, and rigid, representing the so-called chronic catarrhal appendicitis. No packing or drainage, but complete closure of the abdominal wound with buried silkworm sutures.

She remained perfectly well until August, when some of her old symptoms returned. An examination showed the left kidney to have become movable to the extent of ten centimetres, the right kidney remaining securely anchored to the lumbar scar. The left kidney, it may be added, was not movable at the time of operation upon the

right kidney. He proposed to moor the left kidney by nephrorrhaphy in the near future. (Patient presented.)

Case IV.—T. L., aged thirty-one years, married, mother of two children, was sent to him by Dr. Gerrit Blauvelt, of Nyack, N. Y. She considered herself fairly well up to the birth of her first child ten years ago. Since then she has suffered much from backaches, headache, leucorrhœa, nervousness, and dyspepsia. Following the birth of her second child, four years ago, all the above symptoms became aggravated, menorrhagia and bearing-down sensations in the pelvis being superadded.

In February, 1893, she was operated upon by a distinguished surgeon of this city, who performed trachelorrhaphy and shortening of the round ligaments at one sitting.

Although the anatomical results attained by these operations were perfect, no therapeutical results followed, the patient remaining the same as before operation. In August, 1893, by the advice of her family physician, she consulted Dr. Edebohls.

Examination showed the uterus in normal anteversion, the cervix well repaired and a trifle conical, endometritis, bilateral catarrhal salpingitis of a mild type, and a right kidney movable to the extent of five centimetres.

The movable right kidney being held responsible for most of her symptoms, nephrorrhaphy was advised and performed on October 20, 1893, curettage of the uterus being done at the same sitting.

During convalescence an attack of pain in the right groin, accompanied by digestive disturbances, first called attention to the appendix vermiformis. The patient volunteered the statement that she had had similar attacks repeatedly during the past eight years. On palpation, the appendix was found to be of the thickness of a lead pencil, rigid, and painful on pressure.

Ecphyadectomy was performed on November 17, 1893, after the method practiced and advocated by Dr. Robert T. Morris, of this city: an inch and a half incision over the appendix, carried in the direction of the fibers of the external oblique; drawing the ascending colon out of the wound, and following its well-marked band of longitudinal fibers down to the origin of the appendix; delivering the latter; circular incision of its peritoneal and muscular sheaths close to the point of origin; ligation of the mucous coat and ablation of the appendix; inversion of the stump into the cæcum, and closure of the peritonæum over it by the pursestring suture.

The method of Dr. Morris was followed in every detail with the

exception of the closure of the abdominal wound, which Dr. Edebohls preferred to do with buried silkworm sutures. He wished to embrace this opportunity of expressing his indebtedness to Dr. Morris for the neat and surgically perfect method, which he had elaborated and presented to the profession, for the removal of the appendix in cases of chronic, or often so-called recurrent, ecphyaditis.

The patient made a smooth recovery, left bed on the eighth day, and was discharged on the fifteenth day.

CASE V.—T. F., aged thirty years, married, was sent to him by Dr. G. D. McGauran. She had been ill, ever since her marriage ten years ago, with symptoms due to endometritis, bilateral salpingo-oophoritis, and movable right kidney. She had received local treatment for about five years past without improvement.

On November 24, 1893, he operated upon her for removal of the diseased appendages, curettage and ventral fixation of the uterus being performed at the same sitting. While removing the right annexa, the appendix vermiformis, thickened, chronically inflamed, and elongated to a length of thirteen centimetres, was found broadly anherent to the posterior surface of the right broad ligament. It was tied off and removed with the annexa, the stump being turned into the cæcum. He presented the case as parallel with those more or less frequently encountered by every operator, in which the appendix becomes involved in the course of inflammatory affections of the appendages, and is removed together with the latter. He had thus incidentally removed it some seven or eight times.

## Remarks.

Dr. Edebohls did not wish to open up for discussion the entire broad subject of appendicitis; he merely desired to comment upon one or two phases of the question. The first two cases—those of acute gangrenous appendicitis with perforation—he had presented as a type of a class inevitably doomed to a rapidly fatal issue unless saved by the knife. The difficulty lay in recognizing this class of cases as such, and great credit is due the attending physicians for their accurate diagnosis and prompt insistence on operation. The profound prostration, shock, and involvement of the vital functions in these cases of early perforation made it evident that symptomatic treatment can be of no avail; that the only hope for the patient lies in radical measures promptly executed.

The only point of the technique that he wished to touch upon was that of irrigation of the peritonæum in these cases. He could not help but feel that the danger of spreading the infection by irrigation was greater than any possible good that might be hoped for from the measure. He had, therefore, contented himself with dry cleansing.

In regard to the cases of chronic appendicitis, he desired especially to emphasize the fact that the time had arrived when we are to deal with these cases on indications parallel to those which govern us in dealing with cases of salpingo-oophoritis. Just as an operation for the removal of the uterine appendages is unjustifiable, save on one or two exceptional indications of comparatively rare occurrence, unless a lesion of these organs can be demonstrated by bimanual examination, so, before proposing an operation for the removal of the appendix in chronic cases, we should be able to recognize the diseased condition, the chronic appendicitis, by palpation. More than one abdomen had been opened for the purpose of removing a presumably diseased appendix, the latter being found in a perfectly healthy condition. other words, we are to operate in cases of chronic appendicitis—as in cases of salpingo-oophoritis-on objective, not on subjective, indications. He would not detain the society longer with this subject of palpation of the vermiform appendix, to which he had given considerable attention for about a year past, as he was engaged in the preparation of a paper (soon to be published) detailing his observations in the matter and the practical deductions he had derived therefrom.

A feature of special interest, to the surgeon as well as to the gynæcologist, is presented in the reciprocal relations existing between appendicitis and inflammatory diseases of the right uterine appendages. Thus, the salpingo-oophoritis in Case I was certainly the result, while in Case V it was possibly the cause, of the appendicitis.

the state of the s

